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EXAMINER

TANG, KENNETH

ART UNIT	PAPER NUMBER
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2127

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DATE MAILED: 03/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/108,527

Applicant(s)

TOWNSHEND, BRENT

Examiner

Kenneth Tang

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-18, 26-29, 31 and 38-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-18, 26-29, 31, 38-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. This non-final office action is in response to Amendment E, which was received 12/29/03.
2. The indicated allowability of claims 16-17 is withdrawn upon further consideration of the cited art of record.
3. Claims 1-10, 12-18, 26-29, 31 and 38-55 are presented for examination.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1, 10, 15, and 50 are directed to method steps which can be practiced mentally in conjunction with pen and paper, therefore they are directed to non-statutory subject matter. Specifically, as claimed, it is uncertain what performs each of the claimed method steps. The examiner suggests applicant to change "method" to "computer implemented methods" in the preamble to overcome the outstanding 35 U.S.C. 101 rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 10, 12-14, 29, and 44-46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. In claim 10, the term “an electronic mail server” (in line 5) is indefinite because it is not made specifically clear whether it refers to the previous “electronic mail server” (line 3) or an additional electronic mail server.

b. In claim 15, the term “each message signature” (line 5) is indefinite because it is not made specifically clear whether they are associated with the “message signatures” in line 3. If they are, the term should be changed to “each one of said signatures”

c. In claim 29, the term “an electronic mail server” (in line 7) is indefinite because it is not made clear whether it is part of the “set of electronic mail servers” (claim 9).

d. In claim 29, the term “an electronic mail server” (in line 7) is indefinite because it is not made specifically clear whether it refers to the previous “electronic mail server” (line 5) or an additional electronic mail server.

e. In claim 29, the term “electronic mail messages” (line 11) is indefinite because it is not made specifically clear whether there is a new set of electronic messages or if the term is referred to the same electronic messages in line 10.

f. In claim 29, the term “threshold number” (line 10) is indefinite because it is not made specifically clear how it relates to “as having a particular content.”

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-10, 12-14, 26-29, 31, 38-46, and 50-55 are rejected under 35 U.S.C. 103(a) as being unpatentable by Horvitz (US 6,161,130).

7. As to claims 1, 26, and 29 Horvitz teaches an electronic mail system, method and computer-readable medium of automatically generating a set of criteria based on contents of a plurality of emails (*see col. 26, claim 1, for example*) which comprises:

- automatically generating a set of criteria based on contents of a plurality of electronic mail messages received over a network (*col. 3, lines 15-30, col. 4, lines 3-6 and lines 21-31 and lines 54-67, col. 5, lines 1-7 and lines 37-60*);
- wherein the step of automatically generating a set of criteria includes, automatically determining what particular content to use to classify electronic mail messages by performing steps that include determining that a threshold number of said plurality of electronic mail messages have a particular content (*col. 3, lines 15-30, col. 4, lines 3-6 and lines 21-31 and lines 54-67, col. 5, lines 1-7 and lines 37-60*);
- in response to determining that a threshold number of said plurality of electronic mail messages have said particular content, generating criteria that classifies electronic mail

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- messages that have said particular content as a first type of electronic mail (*col. 3, lines 15-30, col. 4, lines 3-6 and lines 21-31 and lines 54-67, col. 5, lines 1-7 and lines 37-60*);
- receiving an electronic mail message over a network/server (*col. 7, lines 1-21*);
 - determining whether electronic mail message satisfies set of criteria (*col. 4, lines 40-67*);
 - if electronic mail message satisfies set of criteria, then processing electronic mail message as first type of electronic mail (*col. 4, lines 40-61 through col. 5, lines 1-7*);
 - if electronic mail does not satisfy set of criteria, then possessing electronic mail message as second type of electronic mail (*col. 4, lines 40-61 through col. 5, lines 1-7*);
 - wherein first type of electronic mail is processed differently than the second type of electronic mail (*col. 5, lines 1-7*).

Horvitz fails to explicitly state:

- wherein at least one message of said plurality of electronic mail messages has not been classified, before determining that a threshold number of said plurality of electronic mail messages have a particular content, as belonging to said first type.

8. However, Horvitz does disclose as background information and common knowledge in the art of Cohen's rule based textual e-mail classifier (*col. 3, lines 15-30*). It demonstrates that rules or criteria for classifying email can be automatically learned and developed from **previous emails**. Therefore, it would be obvious to one of ordinary skill in the art that "at least one message of said plurality of electronic mail messages has not been classified, before determining that a threshold number of said plurality of electronic mail messages have a particular content, as belonging to said first type" because at least one previous message needs to exist for the system to operate.

9. As to claim 2, Horvitz teaches the following:

- generating a message signature for an electronic mail message based on contents of an electronic mail message (*col. 3, lines 15-30, col. 4, lines 3-6 and lines 21-31 and lines 54-67, col. 5, lines 1-7 and lines 37-60*);
- determines whether message signature satisfies the set of criteria (*col. 3, lines 15-30, col. 4, lines 3-6 and lines 21-31 and lines 54-67, col. 5, lines 1-7 and lines 37-60*).

10. As to claim 3, Horvitz teaches determining that a threshold number of said plurality of electronic mail messages have a particular content includes determining that at least a portion of each said plurality of electronic mail messages have said particular content (*col. 3, lines 15-30, col. 4, lines 3-6 and lines 21-31 and lines 54-67, col. 5, lines 1-7 and lines 37-60*).

11. As to claim 4, Horvitz teaches the step of generating a set of criteria based on contents of a plurality of electronic mail messages received over said network includes tracking how many message signature elements of said plurality of electronic mail messages match (*col. 5, lines 37-60 and col. 9, lines 20-55*).

12. As to claim 5, Horvitz teaches wherein the step of generating a set of criteria based on contents of a plurality of electronic mail messages received over said network includes the steps of:

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- generating message signatures for each electronic mail message of said plurality of electronic mail messages, wherein each message signature includes one or more message signature elements (*col. 5, lines 37-60 and col. 9, lines 20-55*); and
- counting how many of said one or more message signature elements match message signature elements from other message signatures (*col. 5, lines 37-60 and col. 9, lines 20-55*).

13. As to claims 6-7, they are rejected for the same reasons as stated in the rejection of claim 1.

14. As to claim 8, Horvitz explicitly fails to teach adding a bulk electronic mail flag to an electronic mail message. However, it would have been obvious to one ordinary skill in the art at the time the invention was made to include a bulk electronic mail flag to the system of Horvitz in order to determine when a bulk electronic mail is received.

15. As to claim 9, it is rejected for the same reasons as stated in the rejections of claims 1 and 8.

16. As to claim 10, Horvitz teaches a method of managing electronic mail (*col. 26, claim 1*), the method comprising the steps of:

- a central server receiving from an electronic mail server a message signature generated from an electronic mail message (*col. 7, lines 1-21*);

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- an electronic mail server determining whether said message signature satisfies a set of criteria based on message signatures previously received by said central server from a set of electronic mail servers (*col. 7, lines 1-21, col. 3, lines 19-25*);
- wherein said set of criteria classifies said electronic mail message and a threshold number of electronic mail messages as having a particular content (*col. 4, lines 54-67 through col. 5, lines 1-7*);
- if said received message signature satisfies a set of criteria, then said electronic mail server processing said electronic mail message as a bulk electronic mail message (*junk e-mail, page 2, 0025*); and

Horvitz fails to explicitly teach:

- wherein the step of said electronic mail server determining whether said message signature satisfies a set of criteria includes determining whether a portion of said message signature matches a portion of each of a threshold number of message signatures previously received by said central server from said set of electronic mail servers (*see Abstract*).

17. Horvitz teaches performing a text analysis by breaking up the messages into pieces so that a detector can classify the messages as junk or not junk emails (*see Fig. 5A, items 510 and 547*). Horvitz also discloses as background information and common knowledge in the art of Cohen's rule based textual e-mail classifier (*col. 3, lines 15-30*). It demonstrates that rules or criteria for classifying email can be automatically learned and developed from **previous emails**. Therefore, it would be obvious to one of ordinary skill in the art that "at least one message of said plurality of electronic mail messages has not been classified, before determining that a threshold number of said plurality of electronic mail messages have a particular content, as

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belonging to said first type” because at least one previous message needs to exist for the system to operate.

18. As to claim 12, Horvitz teaches matching threshold values to portions of the message signature but fails to explicitly teach doing so with a one-way hash function. However, it is well known and obvious to one of ordinary skill in the art that data structures such as a one-way hash function can be used in data processing because this is a standard data structure.

19. As to claim 13, it is rejected for the same reasons as stated in the rejections of claims 10 and 12.

20. As to claim 14, Horvitz explicitly fails to teach transmitting messages by platform-independent byte code. However, it would have been obvious to one ordinary skill in the art at the time the invention was made to add the platform-independent byte code feature to the existing system so that it can run on any given system.

21. As to claim 27, it is rejected for the same reasons as in the rejection of claim 2.

22. As to claim 28, Horvitz teaches:

- wherein determining that a threshold number of said plurality of electronic mail messages have a particular content includes determining that at least a portion of each of said plurality

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of electronic mail messages have said particular content (*col. 11, lines 55-67 through col. 12, lines 1-12*).

23. As to claim 38, Horvitz teaches the computer-readable medium wherein the step of generating a set of criteria based on contents of a plurality of electronic mail messages received over said network includes tracking how many message signature elements of said plurality of electronic mail messages match (*col. 11, lines 55-67 through col. 12, lines 1-10 and see rejection of claim 26*).

24. As to claims 39-41, they are rejected for the same reasons as stated in the rejection of claims 26 and 38.

25. As to claim 42, Horvitz teaches the computer-readable medium wherein the step of processing said electronic mail message as a first type of electronic mail includes adding a bulk electronic mail flag (*col. 12, lines 2-3*). In addition, it is well known and obvious that Boolean values/flags are used to indicate certain states.

26. As to claim 43, it is rejected for the same reasons as stated in the rejections of claims 10 and 42.

27. As to claim 44, it is rejected for the same reasons as stated in the rejection of claim 44.

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As to claim 45, it is rejected for the same reasons as stated in the rejections of claims 15 and 29.

28. As to claim 46, it is rejected for the same reasons as stated in the rejection of claim 14.

29. As to claims 50 and 53, they are rejected for the same reasons as stated in the rejection of claim 1. In addition, Horvitz teaches a text analyzer that breaks up and analyzes the message components named tokens with an indexer which counts how many times an element is matched (*col. 11, lines 55-67 through col. 12, lines 1-10*).

30. As to claims 51-52 and 54-55, they are rejected for the same reasons as stated in the rejection of claim 50.

31. Claims 15-18, 31 and 47-49 are rejected under 35 U.S.C. 103(a) as being unpatentable Horvitz et al. (hereinafter Horvitz) (US 6,161,130) as applied to claims 1, 10, 26, 29, and 31 above, in view of Paul (US 6,052,709).

32. Referring to claims 15 and 31, it is rejected for the same reasons as stated in the rejection of claim 1. Furthermore, Horvitz fails to explicitly teach a central server detecting spam or junk email from a set of electronic mail servers. However, Paul teaches a master server (control center) which acts as a spam email filtering system for a set of electronic mail servers (see Abstract). It would have been obvious to one of ordinary skill in the art at the time the invention

was made to include the feature of a master control server which filters about spam emails for a set of electronic mail servers because the “work” would only have to be done by one server and not the entire set of electronic mail servers.

33. As to claims 16-18, they are rejected for the same reasons as stated in the rejection of claim 15.

34. As to claims 47-49, it is rejected for the same reasons as stated in the rejection of claims 10 and 31.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Tang whose telephone number is (703) 305-5334. The examiner can normally be reached on 8:30AM - 7:00PM, Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Meng-Ai An can be reached on (703) 305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kt
3/18/04


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